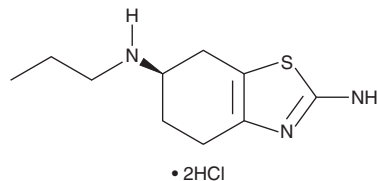


PRODUCT INFORMATION

(R)-Pramipexole (hydrochloride)

Item No. 18234

CAS Registry No.: 104632-27-1
Formal Name: 4,5,6,7-tetrahydro-N6-propyl-2,6-benzothiazolediamine, dihydrochloride
Synonyms: Dextramipexole, KNS 760704, (+)-Pramipexole, SND 919CL2X
MF: C₁₀H₁₇N₃S • 2HCl
FW: 284.2
Purity: ≥95%
UV/Vis.: λ_{max}: 219, 264 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

(R)-Pramipexole (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the (R)-pramipexole (hydrochloride) in the solvent of choice. (R)-Pramipexole (hydrochloride) is soluble in the organic solvent DMSO, which should be purged with an inert gas, at a concentration of approximately 5 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of (R)-pramipexole (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of (R)-pramipexole (hydrochloride) in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Pramipexole (Item No. 11981) is an agonist of dopamine receptors that has applications in Parkinson's disease and other disorders.¹⁻⁴ Pramipexole is usually available as a mixture of enantiomers, with the majority of the dopamine receptor-dependent activity resulting from the (S) form.⁵ (R)-Pramipexole is an enantiomer of pramipexole that is ~100-fold less active than the (S) form as a dopamine receptor agonist.^{5,6} For this reason, it can be used as a negative control for the (S) form in the study of dopamine receptors. Both isoforms are antioxidants that target mitochondria to prevent apoptosis.^{5,7-9} This cytoprotective effect of (R)-pramipexole, without dopaminergic side effects, suggests utility in amyotrophic lateral sclerosis.^{5,10}

References

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WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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